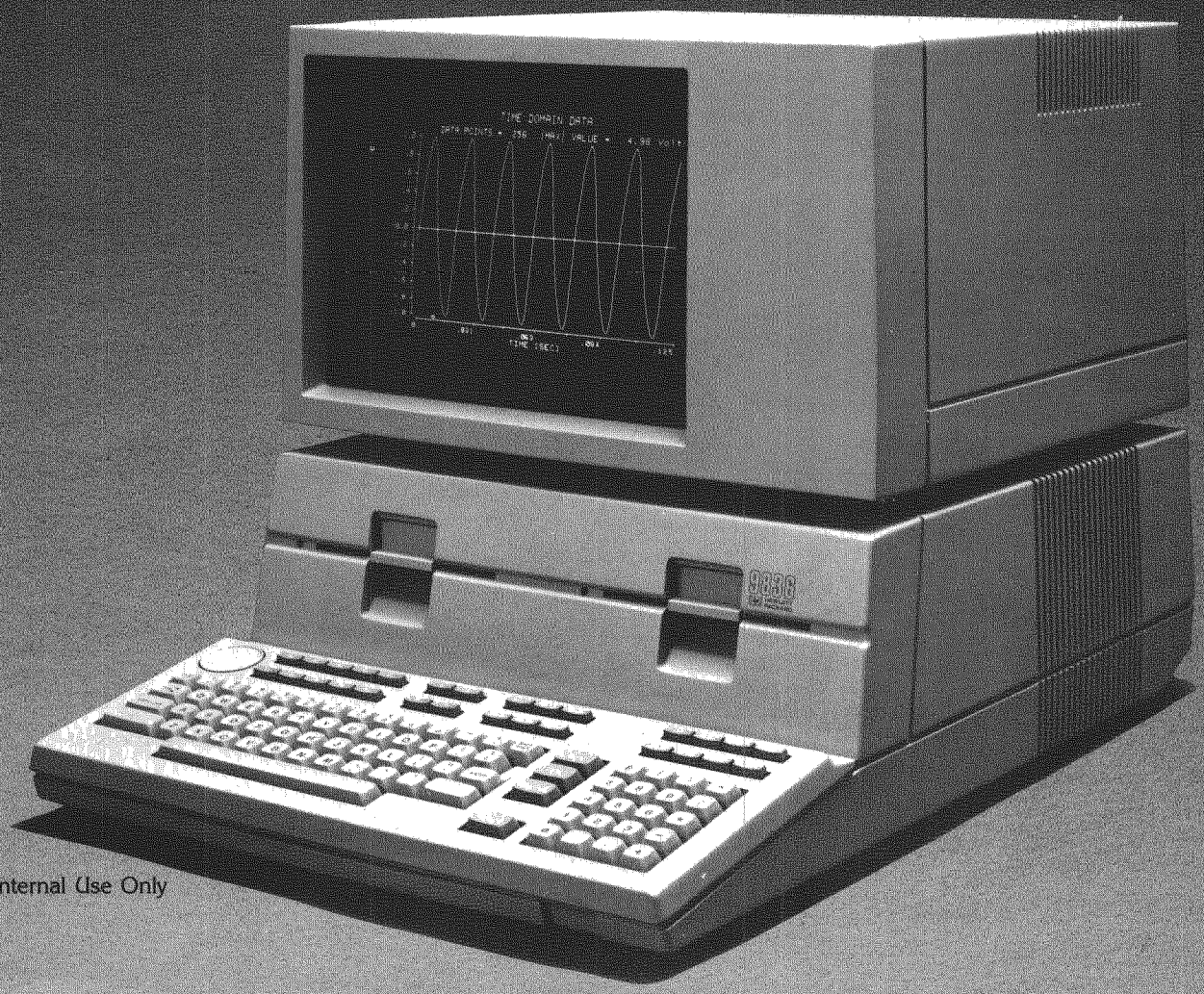
Computer News

For HP Field Personnel December 15, 1981

TCG Launches "Opportunity '82" with New HP 9836A Desktop Computer



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June Wedding, Circulation

Computer News

Vol. 7, No. 4

Computer Marketing

CMG Major Account Presentations: "What's Available" 3

Third Party News
"Third Party Marketing Programs" Brochure is in the Mail 3

OEM News is Launched 3

CSD SIS Enhanced for HP Series 80 Computers 3

Introducing Hardware Training for Desktop Customers 4

1200 bps Modem Available for HP Systems .. 4

CSO New Personal Computer Supplies and Accessories Brochure 4

Technical Computers

DSD No Option 022 for HP 91711B 5

HP 1000 Product Line Cleanup 5

Current Sales Aids 5

RVD HP 2250 Configuration Guides Now Available 5

HP 2250 Ordering Guide Updates 6

DCD Opportunity '82 Knocks: Join Us! 6

HP 9836A Stars in Opportunity '82 6

VisiCalc™ for HP 9826A and 9836A 7

HP 9826/36 Large-Screen Color 8

Compiled Pascal on HP 9826 and 9836 8

HP 9836A Service 8

HP 9845 HP PLUS Priorities 9

FORTRAN 77 Introduced on Desktop Computers 9

SR Succeeds With HP 9915A 10

HP 9826A/9836A Manuals are Coming! 10

New Service Manuals From DCD 12

BDD HP 9915A Low-Cost PROM Programmer Tested 12

Coup '81 Exhibit 12

Business Computers

BCG "Customer Event" Videotape Converted to Movie 13

CSY Virtual Memory on Multiple HP 3000 System Discs 13

GSD The HP 250 Seminar Kit is Here 13

New Resource for CP/M Software Packages on the HP 125 13

South Africa Wins HP 250 Contest 14

GSD Wins International Film Award 14

GSD Welcomes Tom Kent 14

IND HP Rapid/3000 Demos Available Now 14

Hewlett-Packard and HP Rapid/3000 at Users Groups 14

How to Order the Programmer Productivity Pack 14

How to Order SNA and X.25 Video Tapes and Transcripts 15

DSN/MTS and the HP 2624B 15

Data Communications: The HP 30020A vs. the HP 30020B 15

CSP Using HPSLATE 15

BGD MM/3000 in German 16

Terminals

DTD Data Capture Presentation 17

Business Presentation Graphics from Computer Support Corporation 17

Peripherals

BSE Upright HP 7970 On The Way! 19

HP 2685 Print Station Available 19

HP 2680: Shifting Into High Gear! 19

DMD HP 7935H Serviceability: A Primary Design Objective 20

Configuration Considerations for the HP 7908 20

SDD Yearling 21

VCD VCD Introduces Thermal Print Mechanism for OEMs 21

Cables for the HP 2631B/35B and the Advanced Terminal Processor 21

Backtalk

Moonlighting and Other Potential Conflicts of Interest 22

On the Cover:

TCG divisions' Opportunity '82 stars the new HP 9836A Desktop Computer and the Engineering Graphics System 9845 (EGS/45) from DCD. Articles begin on page 6.

HP Computer Museum
www.hpmuseum.net

For research and education purposes only.

Computer Museum

CMG

Major Account Presentations: "What's Available"

By Jerry Klemushin/CMG

Four excellent presentation aids are now available to help your strategic selling efforts with large companies.

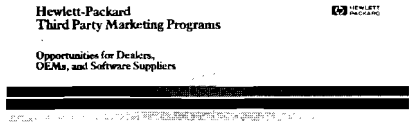
- New "MPN" Brochure for Key Managers (P/N 5952-0159) — a 25-page, high-quality piece to use one-on-one with an executive. It articulates the concept of an integrated network of computers to achieve significant benefits throughout the firm. Examples are given of how "MPN" can improve productivity in each quadrant of applications. Contact: Orrin Mahoney 408-257-7000 x2085.
- HP-DSN presentation — 21 overhead slides with script and videotape giving a description of our current DSN capabilities, strategies, and commitments. HP-DSN is the *glue* for the Manufacturer's Productivity Network. Contact: Pat Loomis 408-725-8111 x4768.
- Paul Ely's presentation on HP in the Computer Business with a focus on "MPN" is now on videotape. It has been sent to ACMs and ASMs worldwide. So, if you are looking for ways to present our business strategy, take a few minutes and review this videotape. Contact: Pat Sullivan 408-996-9800 x2565.
- HP in the Computer Business — Full color slides with script and handout material to communicate HP's strong overall position, strategic focus, the "MPN" design center for products, and our worldwide field organization units. Contact: Debbie Wedding 408-996-9800 x2307.

The Field Marketing Managers are the focal point for the distribution of most material from CMG and divisions. Check with them regularly to keep current on the latest distributions.

Third Party News

"Third Party Marketing Programs" Brochure is in the Mail

By Sheri Godshall/CMG


Hewlett-Packard
Third Party Marketing Programs

Opportunities for Dealers, OEMs, and Software Suppliers

A new eight-page four-color brochure is now available to be used to attract OEMs, software suppliers and dealers. One copy is being mailed to all Third Party reps and technical SRs and bulk distribution is now underway to all sales offices.

The brochure helps define the role of dealers, OEMs and software suppliers, and explains to each of these groups the advantages of working with HP.

It's an ideal piece of literature to give or mail to a prospective OEM or software supplier.

For additional copies, order P/N 5953-2207(50)D from the Lit Depot.

OEM News is Launched

By Sheri Godshall/CMG

The first issue of *Computer News OEM Edition* was mailed to all US OEMs early this month.

The 24-page issue features articles on major new products of the fourth quarter, including the new HP 1000 and 3000 systems, and most IMPACT related products. In addition, it contains a welcome letter and a price changes section.

The January issue will be mailed internationally, with changes in some copy to allow for differences in overseas pricing.

To add people to the mailing list, Third Party and Technical Horizontal SRs should fill out the distribution cards that have been mailed to you by Art Monk.

If you have any suggestions or comments about *OEM News*, please call me at 1-857-7250. We want to make the publication successful, and welcome your feedback.

CSD

SIS Enhanced for HP Series 80 Computers

By Larry Johnson/CSD

Due to popular demand, effective December 1, '81, all of the HP Series 80 Application Pacs will be included under the coverage of the basic Systems Information Service (SIS). This is a considerable expansion of the coverage and value of this service which was previously limited to the ROMs and operating systems only.

Your Series 80 customers can now get Phone-In Consulting on any of their HP Application Pacs. We're not expecting the PICS Systems Engineer to be an applications specialist on all of these Pacs. He/she will, of course, help customers on an operational level. Corvallis Division is also fully committed to back up the SEs with all of their resources for resolving the more difficult problems.

There is no increase in the charge due to this expanded coverage; the list price remains at $25 per month.

Your Series 80 customers *currently* covered by SIS will automatically receive this expanded service.

This added value will make software support for the Series 80 an even better buy.

Introducing Hardware Training for Desktop Customers

By Dan Lochmann/CSD

The Customer Training group at CSD is making a major effort to support the field by offering new training courses. This year, for the first time, HP offers two courses on maintaining Desktop Computers; one for the HP 9835 and one for the HP 9845B. Each is five days long and includes:

- A functional overview
- Theory of operation
- Disassembly/assembly
- Alignments and adjustments
- Tests and diagnostic tools
- A full day of troubleshooting lab
- Service documentation and parts lists.

These courses emphasize "hands on" experience. Students spend more than 50 percent of class time actually working with HP equipment in the training lab.

Prices and scheduled dates can be found in the *Computer Systems North American Customer Training Schedule.* Current prices and part numbers are listed below. These courses are essential for any customer who intends to maintain his own 9835/9845. There are still openings in December for both of these products. The March classes have already started to fill up, so get your orders in soon.

Call Kathy Martin here in Cupertino, TELNET 996-2248 or (408) 996-9800 ext. 2248 for any information about Customer Hardware Maintenance Training.

Product/ Price	P/N	Next Class
HP 9835/ $875	09835-90100	12/7/81
HP 9845/ $875	09845-90100	12/14/81

1200 bps Modem Available for HP Systems

By Jay Friedman/CSD

HP 35016A Remote Support Modem

Now available from HP: a 1200 bps, full duplex modem, for $1,100. It is fully supported by HP and comes with HP's normal warranty.

Originally developed to support the data communication line required for the Remote Support Program, the HP 35016A has general application where asynchronous or synchronous operation is needed. It is compatible with all HP 3000 systems.

The 35016A Remote Support Modem combines VA3400, Bell 212A, and Bell 103 originate/answer modes. (The modem is an OEM product from Racal-Vadic, and is similar to their VA3451A model.) To assure high-quality low-error data communication, an eight-pin modular plug is used to connect the 35016A to the telephone line via an RJ455 programmable data jack (supplied by the telephone company).

The 35016A is currently available and can be coordinated with system delivery. The modem can be ordered through HEART. See the Remote Support Program and modem data sheet (P/N 5953-7174) for further details and modem specifications.

CSO

New Personal Computer Supplies and Accessories Brochure

By Dan Brumm/CSO

Many of your customers have purchased HP personal computers (HP-85 and HP 125). The new Personal Computer Supplies and Accessories Brochure will provide your customers with valuable information about the high quality supplies and accessories available to support their HP personal computers and related peripheral devices.

All of the supply and accessory items in the brochure are available directly from Hewlett-Packard. They may be ordered from CSO directly by phone (in the US 800-538-8787, in California 408-738-4133) or may be ordered through the local HP sales office.

The brochure is formatted into six easy-to-use sections:

- Media supplies — mini data cartridge, flexible discs, media storage items
- Printer supplies — ribbons, print wheels, thermal printer paper, impact printer paper
- Plotter supplies — pens, paper, kits
- Accessories — cables, dust covers, carrying cases
- Furniture — workstations for HP-85 and HP 125 systems
- Reference manuals

Help your customers bring out the best in their HP personal computers — leave a copy of this new brochure with your valued accounts.

This useful reference is available from the Corporate Literature Center (P/N 5953-2010Z).

DSD

No Option 022 for HP 91711B

By Steve Pomeroy/DSD

The HP 91711B Diagnostic and Verification Software Package will not be offered with media option 022. This software package contains online diagnostics for certain CPU functions and firmware, and off-line tests for the CS/80 and ICD (H) Discs. Since the product is a mixture of relocatables and absolute binaries, it can be supplied only on a medium from which the system can be booted.

The 91711B is available on minicartridges (option 020) and mag tape (options 050/051). The HP 1000 Ordering Information Booklet will be updated at the next printing.

HP 1000 Product Line Cleanup

By Jim Pinsky/DSD

The following products are under consideration to be obsoleted. They are low volume items and should not impact your customers. After obsolescence these products will be available through the Specials Group. If there is a problem with the phasing out of these items, please contact me, Jim Pinsky, at DSD Product Marketing, ext. 2308.

To Be Obsoleted

- HP 2111F F-Series Computer with nine I/O slots
- HP 12990 Memory Extender
- HP 2122B M-Series Computer with no memory
- HP 12728A 8-slot card cage
- HP 12885A 8K core memory for 2100A
- HP 12823F Firmware update for 2117F
- HP 92852M RTE-IV HW upgrade kit
- HP 12728D 2108MK documentation kit
- HP 2108K opt 20 M-Series Board Computer — 19-pack
- HP 2155A I/O extender for 2100AS
- HP 13047A User Control Store

Other Products Being Evaluated

- HP 2108K M-Series Board Computer — no memory
- HP 2108B M-Series Computer — no memory
- HP 2109K E-Series Board Computer — no memory
- HP 2109EK E-Series Board Computer — with memory
- HP 2109B E-Series Computer — no memory
- HP 2113B E-Series Computer, 13-inch box, no memory.

Current Sales Aids

By Amy Yecny/DSD

The Current DSD Sales Aids list, dated November 1, '81, was distributed with the "Lit Chit" dated November 20, '81. This list includes all current sales promotion literature, application notes, applicable video tapes, and sales aid kits (slide presentations, equipment, photos, belt buckles, Rubik's cubes, etc.). If more copies are required, please request them from Barbara Berg, DSD, ext. 3148.

RVD

HP 2250 Configuration Guides Now Available

By Alan Housley/RVD

The HP 2250 Configuration Guides and supporting material are now complete and available for your use. We're sure that you'll find all the configuration material invaluable for your success when selling 2250s.

Configuration Handbook

The Configuration Handbook provides you with detailed instructions and examples of how to use the 2250 Configuration Guide. A personal copy is being sent to all PT02 SRs and SEs. This handbook should be considered HP internal information since customers should not be expecting to configure 2250 M&C systems.

Application Summary

The 2250 Application Summary (P/N 02250-93012) is the document that you should use at the customer site to determine his exact application requirements in terms of number of points per signal type. Each signal type is described in a vocabulary that your customer will understand and you can then translate his information into specific HP 2250 hardware that should be purchased.

Configuration Guide

Finally, the Configuration Guide (P/N 02250-93011) is the document that you'll use back at the office for configuring your customer's 2250 system. The application summary information is transferred directly to the configuration guide, and by following each step described in the configuration handbook, you can obtain all of the products required to satisfy your customer's application. This guide should also be considered HP internal information.

These documents have been shipped to each field office to introduce you to the configuration material. Bulk quantities of the Guides and Application Summaries will soon be shipped to each office for stocking in your literature racks.

HP 2250 Ordering Guide Updates

By Alan Housley/RVD

The HP 2250 Ordering Guide (P/N 5953-4289) has recently been updated and copies are now available from the Literature Depot at Palo Alto. The revised document represents ordering and pricing information effective October 1, '81. Plenty of copies are available, so be sure to restock those empty literature racks.

By the way, be certain to specify either US domestic or foreign versions. Foreign versions are printed without US list prices.

DCD

Opportunity '82 Knocks: Join Us!

By Jackye Churchill/DCD

Circle January 13, '82 on your calendars now for the first quarter big event for the Technical Computer Group — a teleconference in vivid color brought to you live from the people at Desktop Computer Division and Colorado Springs Division. We're proud to announce 36 new products to help you meet your quotas in FY'82.

The live teleconference will be viewable in about 30 US sales offices that will have television receiving equipment set up. Be sure to join us for the show.

This introductory conference will include:

- The HP 9836, our new 68000-based CAE engine
- Many new hardware and software accessories for the 9836 and HP 9826
- Pascal on the 9836 and 9826
- The new INTEGRAL/60 Graphics System from Colorado Springs
- Much more, including some surprises on the HP 9845.

We are also putting together a CAE customer seminar, available the week following the teleconference, which we would be happy to assist you in presenting. For details, call Glenda McCall at DCD, ext. 2155.

Additionally, the teleconference will be recorded so that the tape can be distributed for viewing outside the US. We hope you will be as excited as we are about this kickoff for Opportunity '82.

HP 9836A Stars in Opportunity '82

By Martin Nielsen/DCD

Opportunity '82 comprises major product introductions from DCD, Colorado Springs, and ESO/DSD. This article relates to the HP 9836A and its accessories (which will also work with the HP 9826).

The 9836 is the second member of the Chipmunk family, introduced last June with the 9826. The 9836 uses the same CPU (an 8-MHz MC 68000) and system architecture as the 9826. The primary hardware differences are the addition of a second mini-floppy drive and the inclusion of a 12-inch CRT. The new CRT uses the same technology as the HP 2623 terminal, and offers 25 lines by 80 columns in alpha mode, and 512 by 390 graphics resolution. Since a larger 9826 CRT was commonly requested, this should be a popular product.

Like the 9826, the 9836 offers built-in HP-IB, eight backplane slots, graphics (simultaneously displayable with alpha), 64Kb of internal RAM, and a KNOB (rotary pulse generator), all standard. A choice of five international keyboards is available. Any one of three languages (BASIC, HPL, and Pascal) may also be ordered.

The 9826 language systems (BASIC and HPL) have been turned to support the new 9836 hardware features (wider screen and second disc), and at the same time, some new capabilities have been added (several bugs have been fixed as well). See your FTM for details on the language systems. Upgrades are available for customers who already own a 9826 and wish to obtain the new systems.

Pascal, now available for both the 9826 and 9836, offers high performance because it compiles directly to native code instead of being interpreted. Also, many computer professionals prefer Pascal over BASIC because it provides program and data structure for easier code design, implementation, and maintenance. Included with the Pascal language system are an editor, a file manager, a debugger, stream capability, and an MC 68000 assembler, all of which are accessible from a command "shell".

Future activities in Pascal will provide complete hardware documentation for sophisticated OEMs and VEUs who wish to study the internals of the machine to design their own I/O cards or to write their own operating systems.

Another common input from customers was that the eight backplane slots often don't provide enough expansibility. Long term, we are developing an I/O expander for the 9826/36 that will provide more slots. However, we also have two products in the short term that should help alleviate the "slot crunch".

The first is the 256K RAM board. This board offers four times as much memory as its 64K predecessor. This means that three slots are saved on soft system options, and furthermore, this board raises the memory limit on the 9826 and 9836 from 512Kb to more than two megabytes! Our sophisticated CAE users especially will find the extra memory useful.

The second product is the 512K RAM board, which offers four times the capacity of the current solution. This means ROM BASIC will only use one slot, instead of the two that are currently used.

The powerfail protection option provides a new capability. This feature allows a battery to keep the 9826 or 9836 alive and running for up to 60 seconds after a power outage. The powerfail protection may be used either to "ride out" momentary power gaps, or to generate an interrupt to the user's running program if power stays down too long. This capability, long requested by our customers, should be a boon in many CAT applications. (Powerfail is available as a field upgrade for existing 9826s).

A new color interface card is also being introduced. It provides low cost, allows use of any size monitor, and has multiple displays.

Markets and Positioning

The 9836 is positioned as our "CAE engine", and fits into the middle of the CAE spectrum, between the HP-85 and the 9845. On the high end, the 9845 offers superior computation and graphics performance in the 200 series options because of the graphics processor in the top and the bit-slice processor in the base. It also offers a wider range of capabilities, such as language statements, applications software, and built-in color.

Naturally, the 9836's lower cost will attract a large number of customers because it will solve a variety of applications quite nicely. Its 12-inch screen and dual minifloppies will make it ideal for program development and interactive design applications.

The 9836 also fits in at the high end of the CAT spectrum because it inherits the same features the 9826 offers — high performance and superior language capabilities. The 9826 offers a smaller package (for rack mounting or unattended operation) and lower cost. Many users may want to use a 9836 as a program development station for multiple 9826 instrumentation installations.

Software

The 9826 and 9836 BASIC options include a wide variety of utility and demo programs. Some of the utilities include disc backup (for the 9826), disc repacking, a lister, a cross-reference utility, and an I/O card status utility.

Many of the software pacs available on the 9845 have been translated to run on the 9826/36. These include the Stat Library, Numerical Analysis, Graphics Presentations, AC Circuit Analysis, Linear Systems, Digital Filter Design, and Forecasting.

VisiCalc™ has also been implemented on the 9826/36. This program, which has been very popular on the HP-85, provides an "electronic worksheet" that allows the user to manipulate rows and columns of data and test assumptions to aid him or her in making decisions.

A Translator program has been written to convert 9835/45 programs to run on the 9826/36. This program is estimated to be 85-90% effective. Also available is a set of data translation utilities, to transport data from an HP-85, 9825 or 9835/45 to a 9826/36.

"Opportunity '82" is an excellent start for our new product programs in the Technical Computer Group this year. By continually enhancing our product lines, everyone comes out a winner — the TCG divisions, the sales force, and, most importantly, our customers.

VisiCalc™ for HP 9826A and 9836A

By Aland Adams/DCD

On January 1, '82, a new VisiCalc™ product will become available for your HP 9826A and 9836A desktop computer customers. This software product, HP 98810A, is very similar to the well-known VisiCalc™ programs now available for the HP 125 and Series 80 computers.

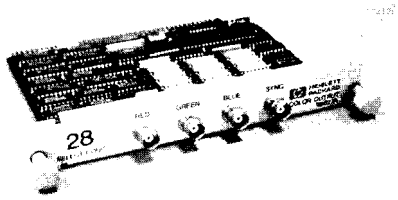
VisiCalc™ provides a means to use a computer to solve problems without having to do extensive programming. It is a powerful tool that can perform tedious tasks in a fraction of the time required using pencil, paper and calculator. This dramatic productivity enhancement allows the user to explore many more options than before. Your customers will find VisiCalc™ an attractive and valuable enhancement for their 9826A or 9836A desktops.

The 98810A product can be used with both the 9826A and 9836A, provided the machine has a minimum of 256K RAM. A printer will also be required for hard copy output. The software is operating-system independent, so it will be valuable to all mainframe purchasers regardless of which language is used.

This is a copyrighted product that basically must be purchased each time a customer buys a new mainframe. However, to increase its cost effectiveness, a right-to-reproduce product, HP 98810R, has been created that allows our customers to reproduce the 98810A product one time.

HP 9826/36 Large-Screen Color

By Dave Deane/DCD



For as little as $3,500 (US), your customers can add large-screen, eight-color displays to their HP 9826 or HP 9836 desktops!

The HP 98627A Color Output Interface for the 9826/36, that sells for $1,000, supports an external, non-HP color monitor for graphics display. The card's outputs connect to the monitor's red, green/sync and blue inputs with coaxial cables. Graphics resolution on the color monitor is typically the same as on the 9836: 512 x 390; but it can be set as high as 512 x 512 for some applications.

The 98627A provides capabilities that best compare with those of a "soft 9872C." System software is provided in HPL and BASIC to communicate with the interface card. All graphics statements that work with the internal CRT graphics also work with the 98627A. In most cases, all you need to do is change the plotter select code to correspond to the 98627A, and programs written to perform color plots on the HP 9872 will run without a problem.

Features

Besides enabling your customers to have low-cost color graphics, the 98627A provides the following features:

- Large screen display for long-distance viewing — Up to 20-inch monitors may be used.
- Remote displays — A monitor may be placed up to 100 meters from the desktop computer without significant picture degradation. (However, some cable lengths may not meet radio interference requirements.)
- Multiple displays of the same image — By daisy-chaining monitors from a single interface card, up to four monitors may display the same picture without significant picture degradation.
- Display multiple images — By using two 98627A cards, two separate images may be created and manipulated independently.

Monitors that can be used with the color card typically cost between $2,500 and $5,000 (US). A list of monitors that have been carefully tested at DCD will be provided to you by January 1, '82.

Compiled Pascal on HP 9826 and 9836

By Jeff Bork/DCD

The Pascal language system brings to the HP 9826 and 9836 desktop computers an entirely new operating system. Along with the operating system come two new programming languages: Pascal and Motorola MC68000 Assembly language.

Pascal is a structured programming language, offering extremely flexible data types. It tends to generate programs that are easy to read and maintain. 9826/36 Pascal is compiled directly to native machine code. This means it offers high computational performance — between two and 20 times the performance of a BASIC 2.0.

For very high performance applications, MC68000 Assembly language programs can be used standalone or called as procedures from Pascal programs. The Pascal system also includes an extensive I/O procedure library that provides such sophisticated device I/O capabilities as DMA and interrupt I/O.

For program development, the Pascal language system includes such minicomputer-like features as an editor, filer, debugger, and librarian. Also included is an LIF (Logical Interchange Format) File Utility for the creation of LIF-compatible files.

The Pascal language system is available as a soft system only. It can be ordered as Option 715 to the 9826 and 9836, and includes the system software as well as 56Kb of RAM. Prices are:

9826A Opt. 715 $12,750 (US)
9836A Opt. 715 $15,750 (US)

The Pascal system software can also be purchased as an add-on to an existing 9826 or 9836 system. Order 98261A Opt. 715; price is $2,000 (US). The Pascal system will be orderable January 1, '82.

HP 9836A Service

By Rick Greer/DCD

The following hardware support programs offered for the HP 9826A are also available for the HP 9836A:

- On-site Product Maintenance (PMMC)
- Field Repair Center Maintenance (FMMC)

PMMC and FMMC are HP's lowest-cost support programs. The PMMC program typically features next-day response to service requests at sites within 100 miles of an HP Service Responsible Office. The FMMC program is a return-to-HP repair service that typically features a maximum three-day receipt-to-shipment response.

The Standard System Maintenance (SMMC) and Basic System Maintenance (BMMC) will *not* be offered for the 9826A or 9836A.

HP 9845 HP PLUS Priorities

By Stacy Plemmons/DCD

The recent announcement of HP 9845/35 FORTRAN through HP PLUS is the first major step in DCD's third party program. Now we're looking for existing third party solutions written in FORTRAN to convert and merchandise in the HP PLUS referenced and listed categories.

Overall, our highest 9845 priorities are in the CAD/CAM/CAT areas, and a new area we define as CAW (Computer Aided Work). More specifically, we are looking for solutions for electrical or mechanical engineers in the manufacturing environment. The solutions we feel will most help you sell 9845s include, but are not limited to:

Electrical Engineering

- Schematic entry
- Printed circuit design
- Design rule check
- Numerical control tapes
- Circuit simulation
- Logic simulation
- Circuit design
- Integrated circuit layout

Mechanical Engineering

- Numerical control
- Fatigue/wear analysis
- Control systems
- Structural (stress analysis)
- Parts components library
- Cost analysis
- Quality control
- Thermosciences
- Kinematics
- Animation
- Manufacturing specifications
- Assembly procedures

Project Management (CAW)

- Word/text processing
- Critical path method
- Project/product budgeting
- Financial management, including basic accounting, final analysis, modeling, and control

If you find a likely candidate, call us immediately. During '82 we want to qualify as many solutions in the referenced category as possible. And, we'll print and distribute field sales manuals and data sheets on selected solutions we feel will most help you sell desktops.

The recent change to double commissions on hardware sold due to third party software is one more indication of how serious we are. So please review the above priority list and help us help you by finding one or more solutions for HP PLUS. Call us at DCD and we'll help you qualify and merchandise your local supplier.

FORTRAN 77 Introduced on Desktop Computers

By Stacy Plemmons/DCD

Have you ever been locked out of a desktop computer sale because BASIC was the only language available? With the introduction of FORTRAN 77, your HP 9835 and 9845 customers can choose from BASIC, Pascal, and FORTRAN. Pascal and FORTRAN are distributed through HP PLUS, but supported directly by IEM (International Electronic Machinery). The SR responsible for locating and signing up this supplier is *Val Jermoluk,* Englewood, Colorado.

Applications software availability is the key reason DCD decided to distribute FORTRAN. IEM's FORTRAN compiler is compatible with the ANSI 77 standard subset, so most of the estimated $4 billion worth of programs currently written in FORTRAN can now be transported to the 9835 or 9845. This is a significant milestone for HP desktops, because in many cases, customers will be able to easily convert their FORTRAN applications from a long-distance mainframe to their local, friendly, HP desktop.

This is important to you, the HP SR, because now those existing FORTRAN applications are friends, not enemies — they're potential "sales assistants" to help you succeed with desktops. (And they're potential candidates for HP PLUS. Call us quickly if you find a likely prospect.)

IEM's Pascal has been on the HP price list since September 1, '81 and is compatible with the defacto industry standard, UCSD Pascal. Most universities today teach UCSD Pascal, so any new engineer should be ready to program an HP desktop.

Underlying both the FORTRAN and Pascal compilers is the Program Development System (PDS) written for the 9835 and 9845 by IEM. The PDS is a full operating system including a screen-oriented text editor, a graphics library, and HP-IB and General I/O library, plus the standard linker, loader and compiler/run time support.

The PDS allows implementation of Pascal and FORTRAN by compiling programs written in those languages into P-code, the native language of a hypothetical, stack-oriented pseudo machine. The PDS also supplies a P-machine emulator which causes the P-code to execute like native code on the 9835 and 9845. This allows run time execution times from 3-5 times faster than comparable interpreted BASIC programs, depending on operations performed.

The numbers to look for on the HP price list are:

Product	Description	Price
97021JA	PDS45 with Pascal	$3,000
97022JA	PDS45 with FORTRAN	3,000
97023JA	PDS45 with Pascal and FORTRAN	4,500
97024JA	PDS35 with Pascal	2,700
97025JA	PDS35 with FORTRAN	2,700
97026JA	PDS35 with Pascal and FORTRAN	4,200
97027JA	IEM Macro Assembler	800
97028JA	Add Pascal to PDS	1,500
97029JA	Add FORTRAN to PDS	1,500

In Europe and ICON, check with local management before ordering these products. All support is available directly from IEM.

For more details on these two exciting new products, see your data sheets or field sales manuals. The Pascal data sheet (P/N 5953-4586) and the Field Sales Manual (P/N 5953-4587) were mailed in September. Also, a Pascal demo (without graphics) and a demo guide were shipped to all US and Canada Sales DMs in October.

The FORTRAN data sheet and the Field Sales Manual are scheduled for mailing to all US and Canada SRs and SEs on December 28, '81. A FORTRAN demo (plus graphics) and demo guide will mail to SRDMs around January 1, '82. Watch for these important new sales tools. Please don't call us or IEM for an early copy; we're overloaded!

SR Succeeds With HP 9915A

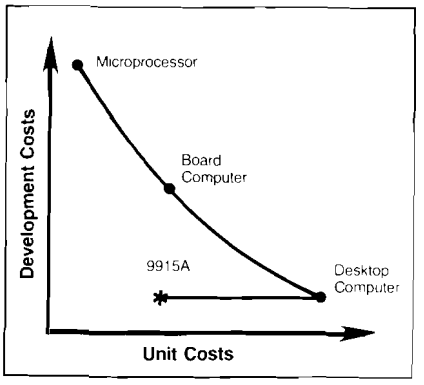
By Ted Chen/DCD

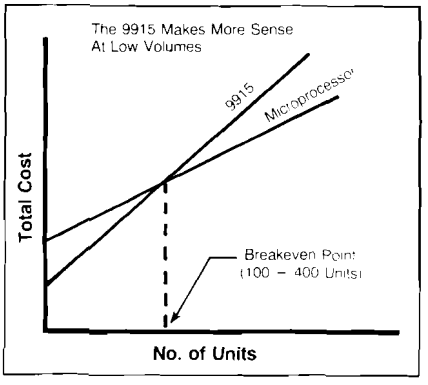
Bill McCarrick, SR in the Atlanta sales office, made three short sales calls to win a significant order for 32 HP 9915A Modular Computers, worth around $60,000. The customer, a large fiber optics cable manufacturer, will use the 9915s to monitor performance of its fiber optics fabrication machinery.

Essential to this sale was the ability to get the 9915 communicating with the production equipment quickly and with little development cost.

Before *Bill* stepped onto the scene, the customer's production engineering team was seriously considering using the 8086 microprocessor. When *Bill* became aware of the opportunity, he advised Engineering Management that it would make more economic sense to take what HP has already designed, instead of starting a new system.

The managers convinced themselves by performing their own economic analysis involving three variables: manpower, time, and testing. The 9915 won hands down in all counts, even though the engineers had extensive experience in designing systems with the 8086. Now that the customer is designing with the 9915, *Bill* comments, "The next time they have a requirement for 40 or 50 (low-cost factory automation controllers) they will choose the 9915."





The figures shown here explain *Bill's* success at a glance. The disadvantage of starting a new design with a microprocessor is high software and hardware development cost. This initial high investment is traded off against the lower unit cost of the final subassembly. With the 9915A, the customer incurs substantially less development cost while paying more on a per-unit basis.

For relatively few units, as in this case, it is more cost-effective to go with the 9915. Beyond a breakeven point, which may range from 100 to 400 units, depending on the application, it makes more sense to use a microprocessor or a board-level computer.

The customer will use the 9915's unique E-PROM program storage capability. Programs will be stored in E-PROM instead of on tape, ensuring program security and increasing reliability. The tape cartridge will be reserved for logging machinery performance data. According to *Bill*, "The 9915 is the best kept secret in the (factory automation) industry." We'll try to change that, Bill — and thank you for the order!

A paper has been written on the economic justification of choosing the 9915. The paper, "Choosing an automation computer — How does the HP 9915A fit?" is being presented at the Invitational Computer Conference that started in September. For your copy, contact Ted Chen at DCD.

HP 9826A/9836A Manuals are Coming!

By Al Jackson/DCD

Since last Christmas, we've been generating a totally new set of manuals for the HP 9826A and 9836A.

Instead of documenting each computer product and accessory in individual manuals, we're writing and packaging information for the complete system user's need:

- Installation and general operating information.
- Learning how to program the computer.
- Quickly finding facts about the programming language.

This means there are only three types of manuals for the 9826A or 9836A BASIC user to deal with:

1. BASIC Operating and Accessory Installation Manuals.
2. BASIC Programming and Interfacing Techniques Manuals.
3. BASIC Language Reference.

A complete manual is being prepared for each DCD computer language system. There will be no ROM manuals, programming notes or peripheral programming manuals for the 9826/9836A computers. When a new accessory, such as the HP 98628A Datacomm Interface, requires programming documentation, the information will be merged into the existing manual set, rather than adding another manual.

BASIC Manual Set

With one exception, we are now shipping a complete set of final manuals with 9826A BASIC systems:

BASIC Manual Set
P/N 09826-87902

Manual	*P/N*
BASIC Operating Manual	09826-90000
BASIC Programming Techniques	09826-90010*
BASIC Interfacing Techniques	09826-90020
BASIC Language Reference	09826-90055
Manual Binders	9882-0895

*Not currently available.

The BASIC Programming Techniques manual is now in the draft stage, and will be available by February '82.

This same manual set will be shipped with the new 9836A Computer. The Programming Techniques manual will cover both machines from the start. The other manuals are being updated to cover the 9836A.

There are currently three supplemental pieces to the BASIC Interfacing Techniques Manual:

- Datacomm Programming Chapter (P/N 09826-90021)
- GPIO Programming Chapter (P/N 09826-90022)*
- RS-232 Programming Chapter (P/N 09826-90023)*

*Not currently available.

The datacomm chapter is shipped with the 98628A Interface. The other chapters will be shipped with their interfaces when available. See "The Bingo File" section of this article.

HPL Manual Set

The HPL manual set is written specifically for 9825 programmers:

HPL Manual Set
P/N 09826-87903

Manual	*P/N*
HPL Operating Manual	09826-90040
HPL Quick Reference	09826-90045
HP 9826 Op. & Prog. Reference	09825-90200
HP 9826 I/O Control Reference	09825-90210
HP 9825 Disc Programming	09825-90220
HP 9825 Matrix Programming	09825-90022
Manual Binders	9828-0898

The HPL Operating Manual covers installation and HPL operation, and explains the differences between 9825 and 9826 HPL. This manual is being updated to also cover the 9836A.

Pascal Manual Set

The Pascal manual set is designed for experienced Pascal programmers. The set will be available for first 9826A/9836A Pascal shipments (early February):

Pascal Manual Set
P/N 09826-87904

Manual	*P/N*
Pascal System User's Manual	09826-90070*
Pascal Language Reference	09826-90071*
Pascal Programming Text	09826-90072
MC68000 User's Manual	09826-90073

*Not currently available.

The System User's Manual covers installation, operating system, and Pascal subsystems (editor, assembler, etc.). The Language Reference is a custom edition of SYBEX's *Pascal Handbook,* by Jacques Tiberhein. The programming text is a copy of *An Introduction to Programming and Problem Solving with Pascal,* by Schneider, Weingart and Perlman. The MC68000 manual covers the MC68000 assembly language.

Ordering Manuals

You can order any of the 9826A/9836A manuals directly from CSO, division A5; however, orders for pieces indicated by an * cannot be filled until mid-February.

The Bingo File

We have been shipping reply (bingo) cards with all 9826A BASIC systems, allowing each end-user to order final copies of all manuals from the factory. We have been mailing final copies of the BASIC Language Reference and BASIC Interfacing Techniques manuals since mid-November, '81. In February '82, we'll mail a final copy of the BASIC Programming Techniques manual to each user who sent us any bingo card shipped with a 9826A BASIC system. We also plan on shipping a free copy of the GPIO and RS-232 Programming Chapters to each user at that time.

We are receiving only about 50% of the cards shipped with systems. When your customer complains about missing manuals, please pass on our regrets for the inconvenience and remind him/her to send in the reply card. If the card is missing, send me his/her name, address and order number. I'll see that he/she gets the missing manual(s).

If you have any questions or complaints about DCD user manuals, call me, Al Jackson, at (303) 226-3800, ext. 2085.

New Service Manuals From DCD

By Karl Stacey/DCD

Two new DCD service documentation items are now available.

HP 9826 CE Handbook Chapter

The HP 9826 chapter for the CE Handbook is now available at CSO (P/N 09826-90039). It will be supported through the CE Subscription Service. It is designed to fit into a 7" by 9" binder which can also be ordered from CSO (P/N 9282-0683).

HP 9825A/B Service Manual

A newly revised service manual for the HP 9825A/B is now available from CSO (P/N 09825-91030).

BDD

HP 9915A Low-Cost PROM Programmer Tested

By Bernd Kircher/BDD

The HP 9915A enables your customer to store application programs in erasable PROMs.

To make the E-PROM burning as easy as possible for our customers, HP has always offered utility programs to work with the Data I/O Models 9 and 19. However, prices for these PROM programmers are fairly high.

For that reason, Data I/O has introduced the Model 20A. This costs approximately $2,000 and has all the necessary features to burn the 9915A E-PROMs.

We have thoroughly tested the 20A, and have written a program that provides remote control for the PROM — downloading and programming, using a 9915A or an HP-85 as a controller.

For more details about this program, contact your local SE in Europe, or Ted Chen at DCD for ICON and the US.

Coup '81 Exhibit

By Bob Ward/BDD

Make no bones about it — the HP 9845B Option 250 is a real winner. Colin Smith of Winnersh, UK, had a quiet but very impressive assistant to help him demo the 9845B!

This was at the Coup '81 (Conference on University Purchasing) exhibition in the UK, and helped Colin to sell the 9845B Option 250, an HP 7580A, an HP 9895A, and an HP 9111A. This indicates the great potential there is for selling to the university and higher education market.

Computer Museum

BCG

"Customer Event" Videotape Converted to Movie

By Jerry Epps/BCG

Now it's more convenient than ever to introduce your customers and prospects to the new IMPACT products coming out of the divisions. We've converted the "Customer Event" video show to 16mm movie film, so now you can host "big screen" showings without having to rent expensive projection video equipment.

With the 16mm film, it's economically feasible to invite even a very small group to view the program. In fact, why not arrange to show the film right at a customer's office? You may discover that many people who couldn't make it to an HP office or other site to see the show will be able to attend a screening at their own plant.

Each FMM has a print of the film and an extra take-up reel. They're packaged in a durable container for easy shipping. Contact your FMM, let them know when you're planning follow-on events, and reserve the film now.

For ICON, Mona Foley is distributing the film, and in Europe they're available from Bob Crum in Boeblingen.

CSY

Virtual Memory on Multiple HP 3000 System Discs

By Samuel Quezada/CSY

The MPE D-MIT contains enhanced virtual memory capabilities which could improve system performance. The enhancements allow virtual memory to be configured across multiple General I/O Channels (GICs). With the MPE C-MIT (MPE IV) multiple system domain discs with virtual memory can be supported on the same GIC. The D-MIT carries the enhancement further to support system domain discs with virtual memory on multiple GICs.

By taking advantage of the virtual memory enhancements, your customers will see improved system performance. The performance improvement will be more noticeable for systems with heavy main memory demands and is accomplished by configuring virtual memory on multiple master drives to reduce system I/O contention. Additionally, by configuring virtual memory across multiple GICs, simultaneous data transfers are possible which will further improve system performance.

The MPE D-MIT is required for this enhancement and is currently available from your Field Software Coordinator (FSC).

GSD

The HP 250 Seminar Kit is Here

By Marilyn Moore/GSD

The HP 250 Seminar Kit is ready for shipment. Through HEART P/N 45990A, *you or your OEM can order* this selling tool at $150 each. The HP 250 Seminar Kit includes a videotape of customer testimonials, a new, expanded slide set and script, literature samples, planning checklists, and seminar invitations. It is virtually a complete planning tool for you and/or your OEMs to present end-user seminars.

We have designed and tailored this HP 250 Kit especially to meet the needs of you, GSD's Small Systems Specialists, and we are making it *available to you at factory cost.* We have received many inquiries as to how to order this selling tool; with this kit, you and your OEM can function as a powerful team in presenting end-user seminars. When your OEM is ready, he/she can present seminars independently using his own kit; the HP 250 Seminar Kit has been designed so that even a novice can plan and produce a successful seminar.

Each and every month since introduction, HP 250/30 Sales have exceeded forecast Worldwide! With your continued efforts and this new tool, we'll be constantly revising our forecasts in an upward direction. Keep up the good work and order your HP 250 Seminar Kit today.

New Resource for CP/M Software Packages on the HP 125

By Mary Etta Port/GSD

As most of you learned during New Product Tour, two resources on CP/M packages include the Lifeboat Catalog (P/N 5953-3479) and the Digital Research Catalog of CP/M Compatible Software. A third resource you may want to purchase is the second edition of the Small Systems Group's CP/M Software Index. The Index lists 740 programs offered by 248 software vendors.

The Index is organized into five areas: Systems Software, General Applications, Accounting Applications, Utility Applications and Industry Specific Software. These areas are separated into a total of 76 categories — 27 entries for word processors, 29 entries for accounting packages, 55 entries of higher level language processors, 14 medical packages, etc.

The Index simply lists the names of the packages plus vendor name, address, and phone number for quick access. Descriptions of the package functions are not included. HP does not imply that by communicating the availability of this Index that the packages will necessarily work with the HP 125; however, they are CP/M compatible and do offer a third alternative to find application programs for our end users.

You can order single copies of the eight page Index for $6 (prepaid). Orders outside of North America are $8. If a quantity order is placed by a dealer, they will receive credit for their examination copy. California residents must add 6-1/2% tax. The address is P.O. Box 5429, Santa Monica, CA 90405.

South Africa Wins HP 250 Contest

By David Garcia/GSD

Congratulations to Dave Aspinal of Johannesburg, South Africa for winning the Mexico versus South Africa HP 250 Sales Contest. We would like to commend Dave and his fellow RSA commercial SRs on an outstanding HP 250 sales performance during FY'81.

The object of the sales contest was simply to sell the most HP 250 systems during the second half of FY'81. Dave led the South African sales team to a total of 16 HP 250 sales during the time period.

As the winning SR, Dave will be flown to Cupertino where he will address a group of SRs and factory managers on the South African small computer sales program. We'll also be flying Dave to Mexico City, so he can impart his wisdom to the SRs there and collect on the case of tequila HP Mexico agreed to furnish the winning sales office.

Congratulations to Dave and HP South Africa once again. Now your only challenge is to beat your FY'81 performance during FY'82.

GSD Wins International Film Award

By Caren Kelman/GSD

The GSD videotape "Captains of Valor" has recently won the bronze award in the Industrial category at the 24th International Film and TV Festival of New York. The videotape was produced to promote the HP 125 Personal Office Computer, and first aired on GSD's New Product Introduction Teleconference in August. The tape is currently available as part of the HP 125 Seminar Kit, orderable through HEART:

Misc. Sales Code: M75
Supplying Division: 67
Marketing Division: 6700
Product Line: 10
"Special Instructions" Section should read: HP 125 Seminar Kit.

GSD Welcomes Tom Kent

By Sam Boot/GSD

Tom Kent

Sales Development welcomes Tom Kent in his new role as a Marketing Engineer for the Southern Sales Region.

Tom will handle sales support for OEM and Dealer Representatives, as well as a back-up to the BCG Sales Development Group.

Tom previously worked for CSD as a programmer/analyst. His computer skill and high energy are most welcome. Give Tom a call if he can help, at (408) 725-8111 x 4388 or Telnet 725-4388.

IND

HP Rapid/3000 Demos Available Now

By Ed Ahrens/IND

An automated set of demos for the HP Rapid/3000 Programmer Productivity Tools are now available. The demos have been distributed worldwide to SE "Product Champions" for the Rapid/3000 products. The demos consist of a series of VPLUS/3000 screens connected by a Transact/3000 control program. The demos may be run in either an unattended mode (ideal for shows or seminars) or in a manual, softkey driven mode which allows the user to step through the demo at his/her own pace. If this sounds interesting, see your Rapid/3000 Product Champion for all of the details.

Hewlett-Packard and HP Rapid/3000 at Users Groups

By Ed Ahrens/IND

Two recent meetings of HP 3000 Regional Users Groups (RUG) provided an opportunity for presentations concerning the new HP Rapid/3000 Programmer Productivity Tools. Customers were given an overview of all four product modules; Inform/3000, Report/3000, Dictionary/3000 and Transact/3000. Our customers are excited about these products! Comments ranged from "great, fantastic and super" to "when can I buy them?" The Users Groups continue to provide a valuable resource for customer contact and feedback.

How to Order the Programmer Productivity Pack

By Jutta Kernke/IND

In addition to the four Rapid/3000 products, we offer a "bundled" package especially for programmers. It's called the "Programmer's

Productivity Pack" (P/N 32248A/M/R) with a list price of $13,000 for the right to use. The package consists of Dictionary/3000, Transact/3000, and Report/3000. Availability for Dictionary/3000 and Transact/3000 is mid-December '81, and for Report/3000 and Inform/3000 in February, '82.

In order to honor the price advantage of this package as offered to HP customers, you'll need to transmit three line items. For example:

1-32244A	Dictionary/3000	$5,000
1-32247A	Transact/3000	6,000
1-32245A	Report/3000	5,000
M60		−3,000
	TOTAL	$13,000

Note: Report/3000 (P/N 32245A) will be back-ordered with March '82 availability. The "M60" discount should be given only with P/N 32245 when ordered as part of the Programmer Productivity Pack (P/N 32248), and the M60 will apply only when shipped. Also, *do not* submit an order with "No Partial" or the complete package will be back-ordered.

How to Order SNA and X.25 Video Tapes and Transcripts

By Jitendra Singh/IND

SNA and X.25 Technology Training Video Tapes were released in October. Copies of the tapes were provided to all the trainers that attended the Data Communication training. Additional copies of the tapes and transcripts can be ordered by providing the following information on a HEART/Cochise 12 order:

Video Tape

Location: Video Products, Palo Alto
Sales Force: 09
Product Line: 95
Mfg. Division: 0700
Supply Division: 0700
P/N SNA 90464 RZ
X.25 Pt. 1 90465RZ
X.25 Pt. 2 90466RZ
Transfer Price: $50/tape

Transcripts

Location: CSY literature distribution, Santa Clara
Sales Force: 02
Product Line: 61
Mfg. Division: 4700
Supplying Division: 4700
P/N SNA 32229-90007 ($3.75)
X.25 Pt. 1 32190-90007 ($2.70)
X.25 Pt. 2 32190-90008 ($2.70)

DSN/MTS and the HP 2624B

By Karen Woolley/IND

Since the introduction of the HP 2624B, several questions have come up regarding the use of an attached printer in a multipoint environment. At present, DSN/MTS has no software spooler or printer support.

Use of the 2624B with an attached printer in a multipoint environment has the same restrictions as were present with the HP 2645. The 2624B also introduces terminal bypass mode which allows an attached printer to be separately addressed. This feature is not supported by DSN/MTS. MTS only supports terminals, therefore any use of an attached printer must be controlled through the terminal as a slaved device with status checking handled by user written application programs.

Data Communications: The HP 30020A vs. the HP 30020B

By Donna Merlino/IND

There have been many questions regarding the difference between the HP 30020A and HP 30020B Intelligent Network Processor. The only difference is the auto call capability and availability. The 30020A has a 10-week availability for orders prior to December 1, '81, and the 30020B has approximately a 16-week availability. Any 30020A orders received after December 1, '81 will be built to order.

All the HP 3000 Data Communication software that works with the 30020A also works with the 30020B — i.e. DSN/MTS, DSN/IMF, DSN/RJE, DSN/MRJE, and DSN/DS. This includes link protocol for X.25 and SDLC protocol enhancements which are included in DSN/DS and DSN/IMF software, respectively.

The 30020B is interchangeable with the 30020A for the HP Series 3X and 4X. The HP Series 64 may only use the 30020B.

Since the 30020B and the 30020A are functionally equal, the A board will be removed from the CPL starting March 1, '82. For those customers who wish to order more A boards, please ask them to do so before March '82.

CSP

Using HPSLATE

By Jay Young/CSP

Have you used HPSLATE yet? As secretary to the Marketing Group of Commercial Systems Pinewood, I do all my work using an HP 2645 terminal and HP 2601 printer — I have no typewriter — and find that SLATE has sufficient capabilities for all my typing and document production.

Working for six Marketing Professionals and three Support Engineers, I probably spend less than 50% of my time typing. SLATE is ideal for memos and letters: it allows easy margin and tab setting, underlining, and filling and justifying, as well as having a full screen editor which makes it simple to correct errors or alter text if necessary. The greatest benefit is never having to re-type anything. SLATE prints documents exactly as they appear on the screen which gives confidence to those accustomed to using typewriters — you know what your letter is going to look like. Another useful feature for first time users is the HELP softkey which provides assistance on selected topics.

Creating files is simple; storage is automatic and I have devised my own file labeling system to make retrieval straightforward.

Most of my typing involves the editing and formatting of manuals and brochures. You can combine TDP with SLATE, giving you access to a much greater range of formatting commands while keeping SLATE's full screen editing and use of function keys.

SLATE makes it very simple to carry out typical editing maneuvers such as inserting and deleting lines (done with a single keystroke), moving text or replacing a word or string. When moving text, for example, SLATE takes you through the move, asking you to indicate which lines you want to move, where you want to move them to, and so on. And SLATE also allows you to undo your editing if you decide that you prefer the original page.

Add to this some of TDP's features — setting page headings and footings, automatic centering, hyphenation, and column creation — and you have a very effective document formatter. To print a combined SLATE and TDP document, you just use the TDP softkey in SLATE's OUTPUT mode.

Our experience in CSP shows that SLATE should be able to cater to the needs of many secretaries who do not require powerful word processing on a regular basis but who routinely produce simple letters, memos and documents. If you have not yet used SLATE, give it a try — it is very easy to learn. If you use it regularly and have any comments or ideas you would like to pass on, contact Carlos Gomes, Support Engineer at Pinewood (COMSYS Code: 1600).

BGD

MM/3000 in German

By Henning Baumgart/BGD

MM/3000 is now available in German! This mammoth task involved the translation of the entire set of manuals (nine User and two System Administrator manuals, a total of about 1,400 pages) and correlating it with the localized product (screens, fieldnames, item names, etc). It was our first translation of such a major project and the experience gained is already being put to good use for the localization of Production Management/3000, which was started at the end of September.

The manuals can be ordered separately or as a set. In addition, a General Information Manual and a Management Summary Brochure are available: Management Summary Brochure — P/N 5953-0586 GE, General Information Manual — P/N 5953-0587 GE, User Manuals and System Administrator Manuals as a set — P/N 32263 DA (from BGD) or P/N 32263-60002 (from PCE).

Binders for single manuals can be ordered under P/N 9282-0890. The complete manual set should be ordered from BGD. The individual manuals and binders should be ordered through P.C.E. (Parts Centre Europe). The localized manuals will also be on the CSO Manuals Data file in the future and will be available through CSO, Sunnyvale.

Individual Manuals	P/N
Produktions- und Kapazitätsgrobplanung	32260-90020
Verwaltung von Teilestammdaten und Erzeugnisstrukturen	32260-90021
Verwaltung der Arbeitsplätze und -pläne	32260-90022
Verwaltung der Lagerzu- und abgänge	32260-90023
Verwaltung der Fertigungsaufträge	32260-90024
Verwaltung der Lagerbestände	32260-90025
Verwaltung der Bestellaufträge	32260-90026
Materialbedarfsplanung	32260-90027
Standardkostenrechnung	32260-90028
System Customization	32260-90029
Systembetrieb	32260-90030

DTD

Data Capture Presentation

By Andy Tasnady/DTD

Data Capture Applications are one of the fastest growing markets. With the introduction of MPN, increasing emphasis is placed upon Hewlett-Packard's data capture products. To aid you in addressing and developing this growing market, DTD is pleased to introduce a data capture overview sales presentation seminar. This colorful hour long 35mm slide presentation from the Productivity '81 data capture seminar presentation covers the following areas:

- Data Capture Overview
- Data Capture Examples
- HP Data Capture Hardware
- HP Data Capture Software

To order this excellent sales tool, transmit a HEART (COCHISE) I-2 order to:

Video Products, Palo Alto
Sales Force, 09
Product, 95
Marketing Division, 07
Supplying Division, 0700
P/N 90480RS

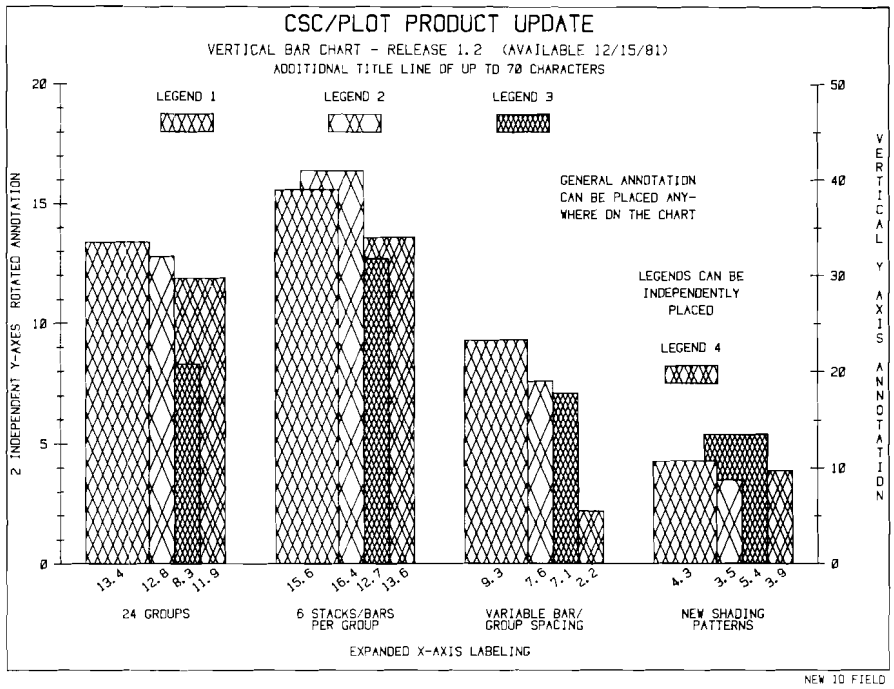
Price $50.

Note: This is not for sale to customers.

Business Presentation Graphics from Computer Support Corporation

By Dan Jorgenson/DTD

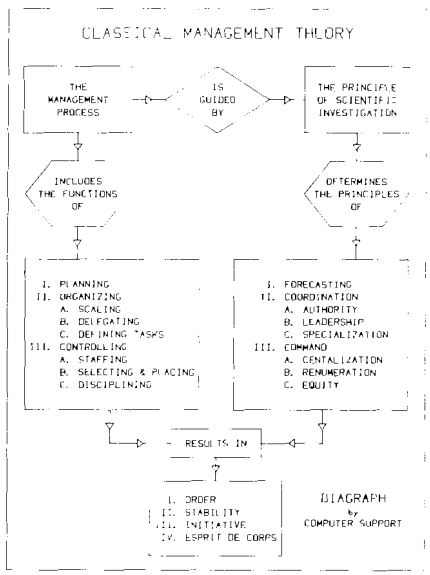
If your customers are looking for more business presentation graphic capabilities than provided by our successful HP 2647A intelligent graphics terminal MULTIPLOT package, they'll be amazed to see what they can do on a 2647 using Computer Support Corporation's (CSC) graphic packages! CSC, an HP PLUS software supplier, offers three versatile software products designed for the 2647A and HP plotters:



CSC/PLOT — A MULTIPLOT-like package that's bound to satisfy your most discriminating customer. Pie, vertical and horizontal bar, and linear charting capabilities are available. An example is shown on the CSD/Plot Product Update Chart.

Art: Chart 1

CSC/DIAGRAPH — DIAGRAPH utilizes the extensive graphics capabilities of the 2647A to produce organization charts, flow diagrams and presentation aids. Combinations of a variety of symbols, line types, tokens and text can be used to produce diagrams for diverse applications. It's designed for the non-technical user and allows precise control in the placement, size and color of symbols, lines and text. Connection of the symbols and the drawing of lines is controlled by the graphics cursor and utilizes the zoom and pan features of the terminal. A DIAGRAPH example is shown in the Classical Management Theory flowchart. Price: $350.



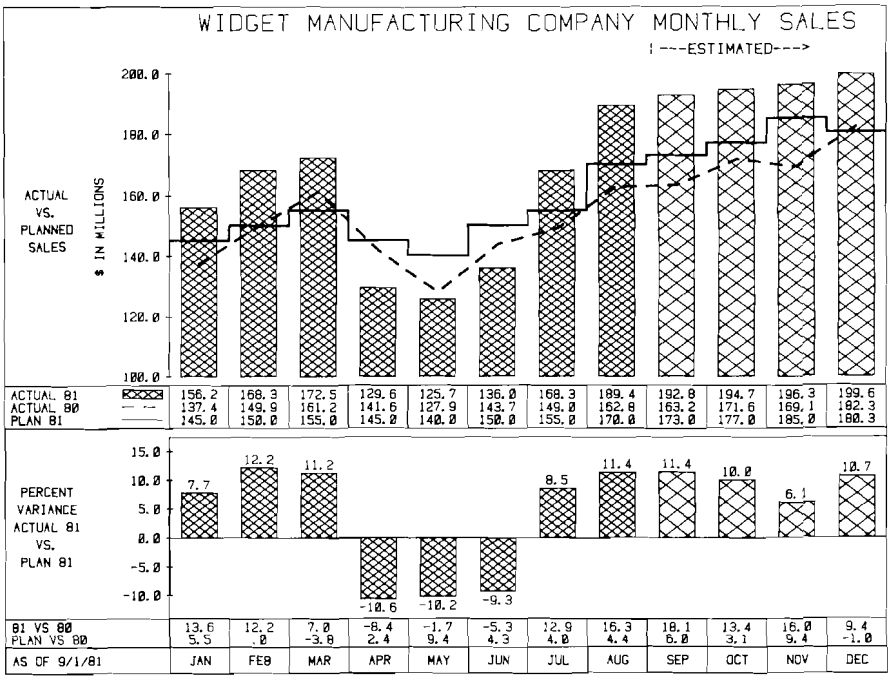
CSC PLAN/VARIANCE — PLAN/VARIANCE is the latest product from CSC and is the first of a series of programs designed specifically for the presentation of Financial/Accounting data using the 2647A. It can be used to compare different groups of data. Typically, current data values may be con-

trasted against historical and/or estimated data. The end product is a pictorial presentation of the performance of companies, divisions, or products, relative to one another or measured against planned objectives and standards.

PLAN/VARIANCE is a menu driven and produces one or two graphs on a page, each of which can combine linear and bar chart features. The two graphs may represent independent groups of data, or the user can interrelate the groups creating dependent values using the calculation capabilities of the program. The calculated values may be plotted or printed in tabular form as specified by the user. An example is the chart titled Widget Manufacturing Company Monthly Sales. Price: $450.

Also, CSC/PLOT and DIAGRAPH are listed in the Display Terminal Application Software Catalog (P/N 5953-2064), as well as other 2647 application software products.

For more information about these products, your customer should contact Fred Schoeller or Mike Kallet at Computer Support Corp., 4215 Beltwood Parkway, Dallas, Texas 75234, telephone 214-661-8960.



BSE

Upright HP 7970 On The Way!

By Sallie Ewing/BSE

HP 7971A, the anxiously awaited upright cabinet for the 7970 series of Magnetic Tape drives, will be announced January 4, '82. You will be receiving sales literature within two weeks. Look in the next issue of *Computer News* for details!

HP 2685 Print Station Available

By Scott Wald/BSE

The HP 2685 Model 40 Print Station is being merchandised to respond to market demand. Since introduction of the 2680 Laser Printing System, SRs, DMs, area managers, and SEs have been suggesting this product. Why? Because customers have been asking for this bundle of products. The Print Station is a complete system of products at a price lower than the sum of the components' list prices.

This system is a great door opener for accounts that have not had prior experience with Hewlett-Packard's commercial computer products. Also, once in the door, the system is easily expanded in the field to provide distributed data processing and interactive office capabilities. The 2685 can be expanded to include DSG, plotters and other printers to solve a firm's complete output needs.

The 2685 (at list price) is worth approximately $2,000 in commissions. And that is just the beginning. With its high reliability and easy upgrades, the 2685 will lead to a long and profitable arrangement for you and your customers.

Configuration

The 2685 includes an HP 3000 Series 40 with 256Kb, HP 2382A System Console, HP 2648A Graphics Terminal, IDS and IFS, HP 7971A Tape Drive (1600 bpi), three GICS, ADCC, all cabling, and of course, the HP 2680A. All of these products are bundled together for only $160,000! At $160,000, the 2685 costs less than the sum of the components' list prices. It is approximately $50,000 less than HP Series 30 based print centers.

Options

A series of options will allow customers to customize the Print Station to their individual needs. The 7976A Dual Density Tape Drive may be substituted for the 7971A. In addition, compilers are available to allow program generation for tape conversion or DDP and office applications. Of course, power supply options allow installation of the 2685 around the world.

The 2685 provides a cost-effective page printer for customers with output up to 1,200,000 pages per month. Even with two 2680 printers the 2685 is a cost-effective solution. By having two printers, customers have the added advantage of printer redundancy — an HP exclusive. In addition, the option to purchase additional 2680s as a business grows allows your customers to spread their expenditures over a period of time. The 2685 will grow with their business!

The 2685 is available on our two new lease plans. It will appear as P/N 26804A on the January 1, '82 CPL and count for three functional units. Coordinated availability is 12-16 weeks beginning December 1, '81. To place orders in the interim please override HEART.

HP 2680: Shifting Into High Gear!

By Ed Pavlinik/BSE

An International Energy Corporation

One HP 2680 customer is a major account consisting of 97 divisions and companies linked together by a network of 17 HP 3000s with hundreds of terminals. Three 2680s are currently installed — two at the central data center and one at a satellite data site.

Major Problems Solved by the 2680

Impact printing bottlenecks — The central data center was being choked by literally tons of paper and forms of varying dimensions! Now the 2680 can generate all printed output on smaller size paper with fewer printers.

User complaints — End users of impact print output continually moaned about print quality. The 2680 now prints better quality reports that are easier to read because the black toner and white paper produce a distinct contrast.

Laser applications

Phase 1 — Initially, the laser printers will function as line printer replacements, displacing four non-HP 300 lpm impact printers and substantially offloading three HP 2619s.

Phase 2 — Expensive preprinted forms, checks, and invoices will be converted to 2680 electronic forms.

Phase 3 — The 2680s will be used in office automation applications together with HPWORD.

2680 Sales Cycle

Key Buyer — The main buyer was the Director of Information Resources, who became an "inside SR" selling the VP of Finance on the 2680.

Key Sales Activity — A Boise factory visit was scheduled to demo the 2680 and the IDS/IFS software. A letter of intent was received two weeks after the Boise visit.

Competition — Honeywell PPS, Xerox 9700, and COM (Computer Output to Microfiche) were considered, but the 2680 was chosen because of price/performance and quality.

Customer Satisfaction

The 2680s have been extremely reliable and the Director of Information Resources says the 2680 is the best new product HP has ever introduced! The customer plans to buy two more 2680s in '82 for installation at two more remote data centers.

DMD

HP 7935H Serviceability: A Primary Design Objective

By Greg Hite/DMD

Hewlett-Packard's reputation of providing reliable and serviceable products will only improve with the new HP 7935H disc drive. Designed into the HP 7935 is a powerful set of internal verification tests and diagnostics which aid in maintaining excellent data integrity and system uptime.

When the 7935 is powered-up, some of the self-tests are rapidly executed automatically. Additional tests (such as the automatic filter check) are performed during spin-up, which takes only 60 seconds. The comprehensive tests begin as soon as the heads load. Among other tests, the drive automatically performs some random seeks and does a read/write verification in dedicated areas called maintenance tracks. One of the last functions performed before control of the drive is released to the SPU is the automatic head alignment. Positioning information for each of the 13 data heads is acquired and stored in the controller's RAM for use during subsequent seeks.

One of the 7935's greatest contributions to the mass storage industry is the ease of serviceability. Through the use of the front panel keypad and alphanumeric display, a multitude of built-in diagnostics and utilities can be run (in addition to internal verification tests) without interrupting the host processor. Not only are the diagnostics easy to run through the front panel, they are also accessible off-line using the HP-85 as a service tool, or online through the host processor at the system console or, remotely on HP systems which support a modem link.

But what about those intermittent failures during drive operation? Every data error encountered (correctable or incorrectable) is logged onto the maintenance tracks. While the drive is not being accessed by the SPU it continuously runs many of the diagnostics in the background to ensure proper operation. Should any diagnostic or test error occur at any time, it will be reordered onto the maintenance tracks enabling a customer engineer to review all events leading up to the service call. Virtually every abnormal condition is detected (in temperature, cooling air pressure, etc.) by the drive and recorded to prevent possible serious data loss.

The diagnostics make it easy to locate the failed assembly and the new foam-molded cabinetry allows rapid access to any assembly without special tools. Thus, the Mean Time To Repair (MTTR) is less than one hour (as compared to the HP 7925's MTTR of nearly three hours).

Even more dramatic is the 7935's exceptionally low cost of ownership. Because the MTTR is less than one hour and *no* scheduled preventive maintenance is required, the BMMC is only $64; SMMC is only $80! The fully enclosed media module has an optional BMMC of $16 and SMMC of $20 (drive coverage is a prerequisite). For customers who do self-support, or decide not to buy media coverage, the defective media modules may be returned for credit under the standard exchange program. The net exchange price is only $825.

Self tests, extensive easy-to-use diagnostics, maintenance track logs, easy access packaging, and the enclosed media module are just a few major contributions the 7935H makes to keep system uptime at an all-time maximum.

Configuration Considerations for the HP 7908

By Karen Archer/DMD

The HP 7908 is our new 16.5Mb Winchester drive with an integrated streaming mode cartridge tape device. It lists for a low $9,900 and an option 140 is available to delete the tape device at a savings of $2,000. Since the introduction of this product, two configuration questions have been frequently asked.

Q: What are the system support plans for the 7908?

A: Currently, the HP 250 and HP 64000 support the 7908. The HP 1000 Models L/E/F and HP 9845 are scheduled to support the 7908 in January '82. HP 3000 support of the 7908 would be inappropriate as the 3000 requires greater disc storage capacity than 16.5Mb.

Q: Can a system be configured with multiple 7908s and a single tape device?

A: The media for the tape device is available in both 16.7Mb and 67.1Mb capacities. Therefore, a single 7908 tape device can fully backup four 7908 drives. It is acceptable to configure a system with four 7908 drives, three of which have option 140*. The backup of the second, third and fourth 7908 must be accomplished through the system CPU, whereas the 7908 drive with the tape device may be backed up offline, without interrupting the CPU.

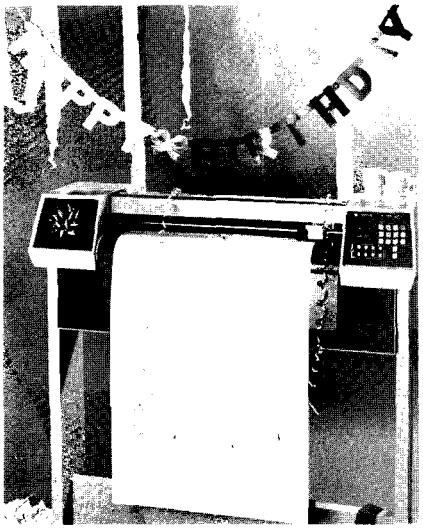
Therefore, the ability to provide offline backup may merit the purchase of individual integrated tape devices. You should also consider that in the above configuration the lone tape drives will be used four times as much as normal, and will exhibit four times the wear characteristics. For this reason, we do not recommend this configuration; however, it is supported on most HP systems.

**Note:* Consult appropriate system configuration guides for maximum drives supported on any given system.

SDD

Yearling

By Bill Holmes/SDD



The impact of the HP 7580A is still reverberating throughout the industry a year after its introduction. It has shaken our competitors, and delighted OEMs and end-users. It has helped make low-cost CAD systems possible.

Thank you for spreading the good news about the speed, repeatability, portability, ease-of-use, and other features that make the 7580A a price/performance champion.

To help you find more qualified customers, our FY'82 lead generation efforts include a direct mail program twice as large as last year's and a new response-oriented ad that is targeted for the sophisticated end-user marketplace. The ad campaign will complement the direct mail campaign by reaching those with funds and authority to buy 7580As, who are less effectively reached by direct mail.

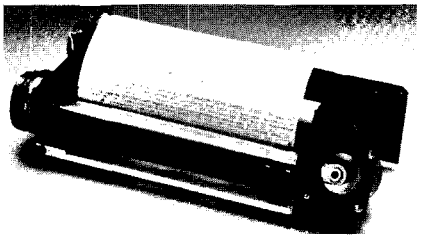
A number of *Industrial Research* and *Machine Design* reprints are still available for you to give to prospective customers, to distribute at shows, or to use in your own direct mail campaign. The *Industrial Research* article is a six-page brochure quality piece, while the two-page *Machine Design* article delves into the design decisions that resulted in the superior product embodied by the 7580A. To order either, contact Nancy Carter, SDD, COMSYS 1100.

You can make '82 another great year for graphics!

VCD

VCD Introduces Thermal Print Mechanism for OEMs

By Erin Greene/VCD



HP 13287A Thermal Print Mechanism

January 1 marks the public announcement of the HP 13287A, HP's first thermal print mechanism for OEMs.

The mechanism's most important feature is its built-in smart controller. This means that the engineering for the mechanism control is already done. All the OEM has to do is add a power supply and eight-bit TTL interface to hook it up to their system. Printing text, then, is simply a matter of sending ASCII characters followed by a print command. Because the new thermal print mechanism includes a built-in smart mechanism controller, OEMs can count on decreased design time and cost.

The 13287A Thermal Print Mechanism (TPM) is a low cost character serial print module designed to easily interface to any OEM application that requires quick, clean convenient hard copy. The TPM is the same mechanism used in the HP 2671 Printers and the HP 2621 Terminals. It prints the full 128 USASCII, line drawing, and Roman Extension international characters as well as 90-dot-per-inch, high resolution, dot-addressable graphics. It features the same 120 CPS, bi-directional printing and fast line feeds for highly efficient throughput and a 9 x 15 character cell for clear, easy-to-read letters.

Print modes include normal (80 columns per 8" line) and compressed (132 columns per 8" line). More detailed technical information will be supplied in the forthcoming data sheet and field training note.

The mechanism's high reliability, low cost, and complete design make it appropriate for a variety of OEM applications including CRTs, medical systems, data logging, and automated test and measurement systems. Contact VCD Sales Development for specific information on existing OEMs and their satisfaction. We've got some good ones going already!

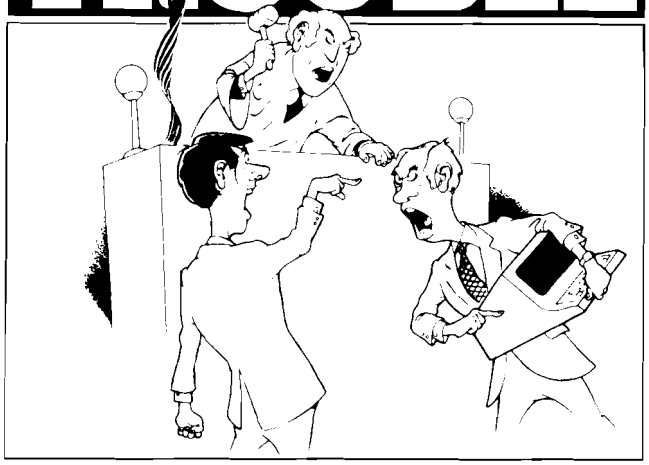
The US list price of the HP 13287A Thermal Print Mechanism is $590. It is offered on the Exhibit A-43 Discount Schedule. Availability is 10 weeks.

Cables for the HP 2631B/35B and the Advanced Terminal Processor

By Al Grube/VCD

The Field Training Manual for DSN/ATP lists a 13242X cable for use when connecting an HP 2631B/35B to the RS-232 direct connect board on the Advanced Terminal Processor. Unfortunately, the 13242X cable is not yet available. In the meantime, there is a solution provided by the 30152 cable available from IND. Use the male-male 25 pin cable that comes with the printer (2635B standard and 2631 #331) and then add a 30152A (female 25 pin to 3 pin). The three pin end of the 30152A will then plug directly into the RS-232 direct board of the ATP.

How to stay out of TROUBLE



Moonlighting and Other Potential Conflicts of Interest

By Marcia Adams/Corporate Legal

Do you know what to do in the following "hypothetical" situations?

- Your neighbor's company wants to employ you to work weekends. Can you take the job?
- Your best friend has an HP system and has asked you to service it on your own time. Can you do it?
- Your cousin offers you a limited partnership interest in a new business venture. Can you buy in?
- You teach a local college night class that HP wants to offer to its customers as an HP course with you as the teacher. Can you continue to teach it at the local college?
- Before leaving to work for HP, you promised your former employer that you would return to train your replacement. Can you spend evenings and weekends for two weeks as a part-time independent contractor consulting for your former employer?

This article will focus on "How To Stay Out of Trouble" as an HP employee when you encounter potential conflicts of interest. Your actions in this regard are guided by company policy rather than "the law."

Even though the idea of moonlighting may seem like a remote possibility to you now, the nature of a field job in a computer company virtually assures that opportunities for this type of activity will come your way. Moonlighting does not have to be a problem if you fully understand HP's position so that you can recognize potential conflicts and deal with them before they become real problems for you or HP.

The general policy as stated in HP's Standards of Business Conduct (SBC) is that HP employees must avoid situations where their loyalties may be divided between HP's interests and those of a customer, supplier or competitor. For example, an HP employee should not ordinarily own more than 5% of any firm which sells to us, competes with us, or buys from us. An employee should not do business with a member of his or her family. An employee is free to take a second job (within the constraints imposed by the need to give HP a full working day), but an employee should not ordinarily take a second job with a company which sells to us, competes with us, or buys from us. A key aspect of HP's policy is the requirement that an employee discuss potential conflicts with his or her immediate supervisor.

The SBC policy is supplemented by *HP's Personnel Policies and Guidelines* which contain the following statements:

"**Conflict of Interest.** Business involvements of some employees in organizations other than HP may not be appropriate. Supervisors and the Personnel Managers should decide the existence of conflicts.

Competitors. It is totally unacceptable for any employee to work directly or indirectly for a competitor of HP. This includes self-employment ventures. Failure of an employee to strictly adhere to this policy is basis for immediate termination.

Moonlighting. An employee who wishes to secure outside employment in addition to HP employment should inform the immediate supervisor. The supervisor should emphasize to the employee that HP is the primary employer and under no circumstances should the second job interfere or disrupt HP duties.

Employee Subcontracts. The Company will generally discourage subcontract work by employees. Even in the absence of conflict of interest, such situations are generally determined not to be in the best interest of an employee/employer relationship. Any exceptions to this guideline will require the approval of the general manager."

When a particular opportunity arises, HP employees and supervisors frequently contact the General Legal Department for help in applying HP's conflict of interest policy to the specific facts. As the guidelines make clear, some of the rules can legitimately and appropriately be modified if the employee and the supervisor sit down and talk about them and decide that a particular situation does not present much of a potential for conflict. Even in the case where a modification is appropriate, it is the employee's obligation to discuss the situation with the supervisor to make sure that the problem has been avoided.

In order to assist you in recognizing potential problems that need to be discussed with your manager, the rest of this article will review the "hypothetical" situations raised earlier which present facts that have actually occurred or are likely to occur for HP employees.

Hypothetical 1: *Moonlighting in general.*

The key here is to clear it with your supervisor. Even if your neighbor's company has a relationship with HP, your manager can decide that your work for that company is not at odds with HP's best interest. This is likely if your ability to give HP a full day's work will not be affected and you will be working in an area unrelated to your job at HP.

Hypothetical 2: *Outside consulting by SE or CE.*

Because your best friend is an HP customer, this hypo presents the clearest case of conflict of interest. The Standards of Business Conduct specifically states that servicing an HP customer's equipment on personal time is a conflict of interest.

Hypothetical 3: *Ownership interest in another business.*

There is no problem investing in your cousin's business if it is not an HP customer, supplier or competitor. If it is, you can still invest if you and your family will not have more than a 5% interest in the enterprise. Even then, you may invest if you disclose your interest to your manager who determines that you "cannot influence HP decisions so as to advantageously serve such interest" (SBC, page 2).

Hypothetical 4: *Teaching the same course for HP and a local college.*

Even though there might be a conflict based on the SBC statement that an employee may not sell his or her own services if HP offers similar services, your supervisor can approve your continued outside teaching. Approval is likely because your are teaching college students rather than HP customers. If you subsequently offered the class directly to an HP customer you would be taking advantage of an opportunity for personal gain that rightfully belongs to HP, which is prohibited.

Hypothetical 5: *Working for former employer to train your replacement.*

The discussion under Hypothetical 2 also applies here. In addition, depending on the circumstances, your supervisor might want to be assured, possibly in writing, that no HP confidential information would be transferred.

Conclusion

In dealing with conflicts of interest, the most important thing to remember is to always discuss your particular situation with your manager ahead of time. If necessary, your manager will disucss it with an HP attorney. There are relatively few absolutely forbidden conflicts, but all conflicts are forbidden unless cleared by your manager.

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